



Iskandar Development Region lies at the southern tip of the Malay peninsula, and is the second-largest economic center after Kuala Lumpur.

ENVIRONMENTAL DAMAGES CAUSED BY ECONOMIC ACTIVITY

Last year, a community built on the three pillars of “Economic”, “Political-Security”, and “Socio-Cultural” was started within ASEAN and relationship between member countries has become increasingly closer. Among them, Malaysia is so called honor-roll country. After successfully transitioning from an agricultural country to an industrial one, it continues a steady growth. On the other hand, this rapid economic growth has also led to increasingly severe urban environmental problems such as traffic congestion and air pollution, thus rising carbon dioxide (CO₂) emissions are problematic.

Professor Yuzuru Matsuoka at the Graduate School of Engineering of Kyoto University, an expert on the problem of climate change, pointed out,

“Based on 10.4 tons of CO₂ emissions per capita in 2005, it is estimated to increase by 60% 2020 and about 100% by 2030”. As the Malaysian government is targeting a reduction in CO₂ emissions intensity by up to 40% based on its 2005 levels by 2020, it is doubtful if they could accomplish this unless they take action in early stage.

According to Professor Matsuoka, in recent years the attitude towards the works on the global warming in the world has been changed. “Until around 2000, it is considered that this was a task mainly for central government organizations such as the United Nations and the developed countries. However, it has been increasing awareness thereafter that the local government and the citizens also need to work on it together”. In Malaysia as well, this awareness was rising, and the planning including a citizen-level element for revision of energy consumption and the lifestyles towards the future “low carbon society” has started in 2011. This project is being conducted by the research team of the University of Technology, Malaysia in cooperation of strong tag with the research team of Japan, Professor Matsuoka as the team leader.

Iskandar Development Region has become a model district, which is large-scale ongoing industrial development project that is designated as an economic special zone in 2006. First, the project conducted research on the current situation of Malaysia as a whole and Iskandar. The project organized every piece of current situation including social economy, traffic volume, energy and environment burden, then set a vision of how it will be changed in the future. Matsuoka said, “Our research team in Japan has experiences of supporting on the similar policy development in India, Thailand, Vietnam, etc.” He added that in order to make sure the Malaysian research team can continue carrying it out on their own in the future, Japanese research team is sharing as much as possible the techniques of data analysis and so on.

EFFORTS MUST START WITH EACH INDIVIDUAL PERSON

In this way, the “Low-Carbon Society Blueprint,” a plan including over 200 individual programs, was determined. Some of these programs, such as tree-planting activities, promoting composting, and posting electronic bulletin board systems near bus stops for sharing information and promoting the use of public transportation, have already been started up. One of these is the activity based on a checklist with items such as saving electricity used for air conditioning and TV sets and splitting trash into different categories and recycling. This program enables children to take on the ecological challenges in familiar areas, and is called “Eco-Life Challenge.”

This initiative first started in Kyoto, and it has been implemented at 23 local elementary schools in Iskandar after some revisions were made to adapt it to the situation in the community. This initiative had a large influence, and its implementation was expanded to all 226 elementary schools in Iskandar last year. Professor Matsuoka made the following comment. “I’ve heard that some of the schools are competing against each other for the project, and



Discussing the progress of the project with members of the collaborative research. (Professor Matsuoka is on the right side.)

the kids are enjoying it while they learn about the environment.” This year, the project has expanded to include middle schools and local communities. In addition, the neighboring countries are also starting to take a major interest.

Professor Matsuoka made the following comment. “Establishing a plan for a low-carbon society and starting to put it into action is already one achievement.” But the most critical steps are yet to come. The plan determined this time will be implemented until 2025. In order to keep it running continuously afterward, the cycle of planning, implementation, evaluation, and improvement must be applied, and someday it must be spread to other areas throughout the country as well.

Professor Matsuoka made the following comment, “In the same way that researchers in Asian countries we’ve supported in the past have gone on to become the kind of people who can take a leading role as their countries’ representatives at international conferences, the researchers in Malaysia are also growing and developing from this experience. Supporting building organizations with this kind of personnel is in and of itself a significant part of our cooperative relationship.” Malaysia’s long-term challenge has begun, as the world moves toward the global task of realizing a low-carbon society.



Inspecting a palm oil factor to consider usage possibilities for biomass energy.



A New Form of Environmentally-Friendly City for the Future

Global warming is the worldwide problem. In Malaysia, communities are working together on a new initiative with the goal of achieving a “low-carbon society.” A Japanese research team is providing support for this project.



The workbook for Iskandar’s “Eco-Life Challenge.” Participants use this checklist for reference and take on various ecological challenges.

Investigating the composition of household trash to use as a reference for recycling projects and educational activities.